

# **SPECTROLINE<sup>®</sup> MI-1600P MIST INFUSER™ PUMP**

## **OPERATING INSTRUCTIONS**

### **GENERAL DATA:**

The MI-1600P Mist Infuser pump was designed for the easy infusion of pint bottles of AR-GLO fluorescent additives, and does not require the use of refrigerant as a propellant. The pump reservoir holds up to 1 pint of AR-GLO, and is ideal for use on larger refrigeration systems. When infused at the recommended ratio of 1/4 oz. of AR-GLO 4 per gallon of refrigeration oil, 1 pint will treat 64 gallons of oil.

### **HOW TO USE THE MI-1600P PUMP**

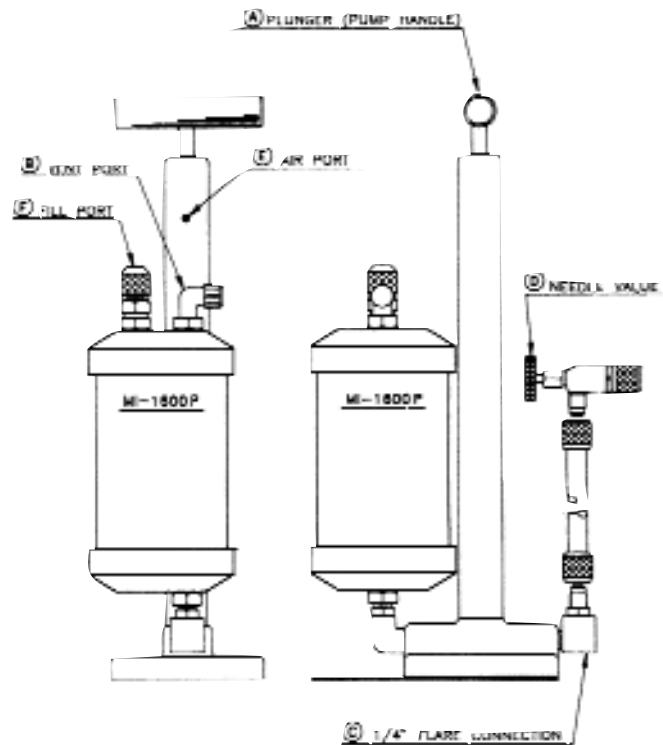
**NOTE:** Each MI-1600P is supplied with a 2 oz. refrigeration oil container for the purging procedure described below.

#### **1. PURGING:**

- Make sure the pump handle (A on diagram) is in the *down* position. Remove the vent port cap (B).
- Attach the refrigerant hose to the 1/4" flare connection (C) at the base of the pump and tighten.
- Attach the valve (D) to the opposite end of the hose and tighten.
- Close the valve fully by turning it *counter-clockwise*.
- Open the valve slightly from the "backseat" (closed) position approximately one-eighth turn *clockwise*.
- Fill the 2 oz. container with clean refrigeration oil and pour the oil into the fill port (F). Pull the pump handle up *slowly*, taking care not to cover the air port on the top section of the pump (E).
- Slowly* press the pump handle downward a full stroke while holding the hose upright, until a small amount of oil bleeds onto a rag placed at the unconnected end of the refrigerant hose. (This precautionary measure removes air and moisture from the hose before they can enter the system.) **STOP PRESSING ONCE OIL BEGINS TO BLEED FROM THE HOSE** and close the valve (D).

#### **2. FILLING AND INFUSING:**

- Remove the cap from the AR-GLO pint bottle and screw on the pour nozzle. Snip the tip off the nozzle at the line.
- Remove the fill port cap (F). Empty the *entire* contents of the pint bottle into the MI-1600P fill port and replace the cap.
- Attach the valve (D) to the compressor's access port. Open the valve by turning it *clockwise* until you cannot turn it any further.
- Slowly* depress the pump handle all the way.
- Slowly* pull up on the pump handle. Repeat this routine six times, for a total of seven strokes.
- To flush the remaining AR-GLO additive from the MI-1600P into the refrigeration system, put 2 oz. of refrigeration oil into the Mist Infuser pump through the fill port.
- Pump two times to flush the remaining AR-GLO from the Mist Infuser reservoir and refrigeration hose. **DO NOT PUMP MORE THAN TWO TIMES.** A small amount of oil should be left in the reservoir, ensuring that



air has not been introduced into the system during the flushing procedure.

### 3. **DISCONNECT:**

**NOTE:** If more than one pint of additive is being infused, do not carry out this flushing procedure until all the AR-GLO has been added to the system.

a. Close the valve (D) on the hose connection and disconnect the valve from the compressor.

Allow adequate time for the AR-GLO additive to circulate through the system. Check adjacent sightglasses with a high intensity Spectroline ultraviolet lamp for the presence of a yellow-green glow. On large refrigeration systems, e.g., a large rack, or a system where one or more efficient oil separators may be present, it is not unusual to obtain the best results (and find most leaks) after allowing 24-48 hours for AR-GLO to circulate through the system.

**NOTE:** As a rule, each full downward stroke of the Mist Infuser pump handle will infuse 2 oz. of AR-GLO into the system.

For the best fluorescent response - KEEP YOUR REFRIGERATION OIL CLEAN!

Questions?

For technical assistance,  
call Spectronics Corporation's Applications Engineering Department  
toll-free at 1-800-274-8888  
from 8 A.M. - 5 P.M. Eastern time, Monday - Friday.

